



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/034,415	03/04/1998	PASCAL MICHAUD	1798-7267	3308

7590 * 09/09/2003

FREDERICK F. CALVETTI
C/O SMITH, GAMBRELL & RUSSELL
1850 M. STREET, N.W.
SUITE 800
WASHINGTON, DC 20036

EXAMINER

CROSS, LATOYA I

ART UNIT	PAPER NUMBER
----------	--------------

1743

DATE MAILED: 09/09/2003

40

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/034,415

Applicant(s)

MICHAUD, PASCAL

Examiner

LaToya I. Cross

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-8 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8 and 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 23, 2003 has been entered. Claims 1-4, 6-8 and 11-16 are pending.

Claim Observations

Claim 1 at line 4 of the claim contains the term "water-miscible polyfluorinated alcohol". It appears from the specification at page 3, lines 8-13 that Applicants intended "water-immiscible polyfluorinated alcohol. An amendment to this affect should be submitted in response to this Office Action.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-4, 6 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 3,957,672 to Zisman et al.

Zisman et al '672 disclose a surface-active composition for displacing aqueous or organic liquid films from solid surfaces. The surface-active composition contains a fluorinated polyether which provides surface activity to the composition. See col. 4, lines 56-65. The

Art Unit: 1743

composition may additionally contain fluoroalcohols (fluorinated alcohols) and perfluoroalkane solvents (fluorinated solvents), as recited in claim 1. See col. 7, lines 17-33 of Zisman et al.

The fluoroalcohols (fluorinated alcohols) have the formula $F(CF_3)_m(CH_2)_nCH_2OH$, where m is 1-10 and n is 1-15, similar to that recited in claim 2. This formula encompasses Applicants' preferred alcohol, tridecafluorooctanol recited in claim 3. The fluoroalcohols are present in an amount of up to 1% (col. 3, lines 10-34 and col. 7, lines 30-33). The perfluoroalkane solvents may include perfluorohexane and are present in an amount of up to 99% by volume, as recited in claims 6. Perfluorohexane is known to have a boiling point of 58-60°C, as recited in claims 4 and 13. The amount of fluorinated polyether (surface active agent) used is from 0.5 to about 1% by weight, as recited in claims 1, 11 and 15 and (col. 4, lines 60-61). At col. 8, line 61 – col. 10, line 5, Zisman et al disclose that the solvent composition is applied to a surface to displace liquid films, as recited in claim 12.

Zisman et al differ from the instantly claimed invention in that 1) the exact amount ranges of components are not disclosed and 2) there is no disclosure of the composition not exhibiting a flash point.

With respect to the amounts of components, Zisman et al disclose ranges for the surface active agent and fluorinated solvent that overlap or lie within those claimed by Applicants. Zisman et al disclose 1% fluorinated alcohol, whereas Applicants claim at least 2% fluorinated alcohol (claims 1 and 14). In the case where the claimed ranges overlap or lie inside the ranges disclosed by the prior art, a prima facie case of obviousness exists. Similarly, a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap, but are close enough that one skilled in the art would have expected them to have the same properties. See MPEP 2114.05, citing *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ

Art Unit: 1743

773 (Fed. Cir. 1985). In the instant case, Applicants' claimed amount is so close to that of the prior art that one of ordinary skill in the art would expect that the amounts would have similar results. Applicants' have failed to show that 2% fluorinated alcohol performs significantly differently than 1% fluorinated alcohol. In fact, the table in Applicants' specification at page 11, shows 91-95% water removal with 1% fluorinated alcohol and 91-93% water removal with 2% fluorinated alcohol, further showing that there is not a significant difference in using 2% over 1%.

With respect to the flash point of the composition, the composition of Zisman et al comprises similar components as claimed by Applicants. Thus, one of ordinary skill in the art would expect that they would have similar properties including flash point, absent evidence to the contrary. The compositions of Zisman et al consist essentially of a surface active agent (fluorinated polyether), fluorinated alcohols and fluorinated solvents. The amounts of the components are similar to those instantly claimed. Thus, one of ordinary skill in the art would expect that the compositions would have similar properties. See MPEP 2112.01.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious within the meaning of 35 USC 103 in view of the teachings of Zisman et al '672.

4. Claims 1-3, 7, 8 and 7-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zisman et al '672 in view of US Patent 5,514,301 to Bil et al.

Zisman et al is described above. A different embodiment of Zisman et al consists of the displacement of liquids from solid surfaces for short periods of time. In this embodiment, Zisman et al disclose the use of the fluorinated polyether compound as a solvent in combination with the fluoroalcohol (col. 4, lines 56-65). See col. 4, lines 56-68.

Art Unit: 1743

This embodiment differs from the instantly claimed invention in that no surface-active agent is provided.

Bil et al teach compositions for dewetting solid surfaces. The compositions of Bil et al comprise a surface active material prepared by the reaction of alkyl phosphoric acids, fluorinated amine and a quaternary ammonium chloride in solution with a halogenated solvent, as recited in claim 16. Bil et al disclose that in using such surface-active agents, the de-emulsification time can be reduced and in the dewetting process, separation of the aqueous phase and organic phase will be accelerated. See col. 1, lines 26-32 and col. 2, lines 1-8.

Thus, it would have been obvious to one of ordinary skill in the art to use the surface active agent described in Bil et al in the dewetting compositions of Zisman et al in order to allow the emulsion formed by the dewetting composition with the extracted water to better separate into two phases allowing the aqueous phase to be removed faster. This will provide a quicker, more efficient removal of water.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious within the meaning of 35 USC 103 in view of the teachings of Zisman et al '672 and Bil et al '301.

Response to Arguments

4. Applicant's arguments filed June 23, 2003 have been fully considered but they are not persuasive. Applicants argue that the amount of fluorinated alcohol present in the instant invention (at least 2%) is not obvious over the 1% fluorinated alcohol disclosed by Zisman et al. The Examiner disagrees. In concluding that the 1% fluorinated alcohol of Zisman et al renders obvious Applicants' claimed 2% fluorinated alcohol, the Examiner considered Applicant's own

Art Unit: 1743

examples found at page 11 of the specification. Fluorinated alcohol present in an amount of 2% did not perform significantly better than 1% fluorinated alcohol. The amounts claimed are so close to that disclosed in Zisman et al that one of ordinary skill in the art would have expected that the two compositions would provide similar performance in water removal. Without further showings of the unexpected results in using 2% fluorinated alcohol, the claims cannot be deemed patentably distinguishable over Zisman et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaToya I. Cross whose telephone number is 703-305-7360. The examiner can normally be reached on Monday-Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 703-308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

LaToya I. Cross

Examiner

Art Unit 1743

